## Remarks

In view of the above amendments and the following remarks, favorable reconsideration of the outstanding office action is respectfully requested. Claims 1-45 remain in this application. Claim 1 has been amended herein. New claim 45 has been added.

# 1. 112 1st Para. Rejection

The Examiner has rejected claims 1-44 under 35 USC 112, first paragraph, as based on a disclosure which is not enabling. Examiner asserts certain essential features are not included in the claims. In particular, the Examiner seems to indicate that the essential features are the "barrier layer" and that the dopant in the second portion is "fluorine." In re Mayhew is cited by the Examiner for the proposition that where a claim fails to recite an essential claim element, the claim is not supported by an enabling disclosure.

Respectfully, the claim, as drafted, is adequately supported as it includes all the essential elements. First, the barrier layer is indicated as being present and desirable in an exemplary embodiment (i.e., an example). However, in the broadest aspect of the invention, as described in the Summary of the Invention and the claims, it is clearly indicated that only a first and second sections of different density are required (See page 3, lines 5-10). Likewise, it is stated in the specification that certain exemplary embodiments may include a barrier layer. Notably however, the method including forming a barrier layer is indicated as being exemplary (Page 4, lines 13-15), and is, therefore, not essential. Likewise, Claim 1 and Summary indicate that the second portion only need include a dopant. Page 5, lines 27-28 indicate that the second region may include the various dopants as listed on page 4, line 30-31. Thus, the inclusion of the term fluorine is also not essential. Accordingly, since neither of these terms are essential claim terms, the 112, 1st para. rejection of claims 1-25 should be withdrawn. Regarding the rejection of claims 26-44, applicant's attorney does not understand the rejection. Fluorine is included 26 and it is clear from the example that no barrier layer is described as existing between the moat and abutting radial portion. Accordingly, the presence of a barrier layer in claim 26 cannot be essential. Thus, the 112, 1st para. rejection of claims 26-44 should be withdrawn.

# 2. 112, 2<sup>nd</sup> Para Rejections

Examiner has rejected claims 1-44 under 35 U.S.C. 112, second paragraph, as being indefinite. The rejection is somewhat confusing, as Examiner does not state what language is deemed to be indefinite. As best Applicant's attorney can ascertain, Examiner seems to dislike that the claim states a first portion has a density difference as compared to the second portion, and Examiner believes that the first portion must be of sufficient density to prevent dopant migration.

Respectfully, the claim rejection is traversed. A claim is indefinite only if it fails to clearly delineate the boundary between the claimed and unclaimed subject matter. See In re Vogel, 422 F.2d 438, 442, 164 USPQ 619, 622 (CCPA 1970). See also, In re Vamco Machine & Tool, Inc., 752 F.2d 1564, 1577 n.5, 224 USPQ 617, 625 n.5 (Fed. Cir. 1985) (The claim sets forth the metes and bounds of the rights which the applicants seek to obtain). In the present case, the claims language is entirely capable of being understood and the scope thereof is readily ascertained. Notably, the fact that a claim is broad does not make it indefinite. Further, the limitation that Examiner seems to impose would unduly limit the claim and is not required to distinguish the prior art. Accordingly, the 112 second para. rejection of claims 1-44 should be withdrawn.

#### 3. 103(a) Rejections

Examiner has rejected claims 1-44 as being unpatentable over Dabby (US 6,474,107) in view of Kanamori et al. (US 5,556,442) and Andrejco (US 4,812,153).

Dabby teaches a method of making an optical fiber perform wherein a pure silica core rod has soot applied to an outer surface thereof which is subsequently doped with fluorine in a consolidation furnace. Examiner states that it would be obvious that some fluorine would be stripped from the cladding. Andrejco teaches that application of heat will strip some fluorine from the cladding.

Respectfully, the rejection of claim 1 is overcome. Most prominently, the last step in Dabby is fluorine doping during consolidation at 1450°C while the perform is lowered into the heat zone. Since the sintering takes place in the presence of a steady flow of the fluorine dopant, it is not reasonable to expect that any F will be stripped. Notably, after sintering, the density of the core and cladding in Dabby are approximately equal. In the present invention of claim 1, the dopant in the second portion is intentionally stripped from at least a portion of the second portion during sintering. The combination of Dabby, Andrejco or Kanamori fails

to teach or suggest the invention as now claimed. Accordingly, the 103(a) rejection of claim 1 should be withdrawn. Additionally, claims 2-25 are allowable for at least those reasons.

Regarding claim 26, Dabby teaches a fluorine doped cladding, not a moat. A moat is a depressed structure located inward from the cladding. Dabby does not teach stripping substantially all the fluorine from the radial portion adjacent the moat. Neither Andrejco nor Kanamori correct this fundamental deficiency. Thus, the 103(a) rejection of claim 26 is flawed and should be withdrawn. Claims 27-44 are allowable for at least these reasons.

Examiner should note that original claims 5-7 are allowable as none of the cited references teach or suggest stripping the dopant from the lower density portion by the use of a stripping agent. Accordingly, new claim 45 which claims this combination is allowable.

### 4. Conclusion

Based upon the above amendments, remarks, and papers of record, Applicant believes the pending claims of the above-captioned application are in allowable form and patentable over the prior art of record. Applicant respectfully requests reconsideration of the pending claims 1-44 and a prompt Notice of Allowance thereon.

Applicant believes that no extension of time is necessary to make this Response timely. Should Applicant be in error, Applicant respectfully requests that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Reply timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.

Please direct any questions or comments to Randall S. Wayland at 607-974-0463.

Respectfully submitted,

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